

# Aquatic Resources Education Center (AREC) – School Programs

DOEE Aquatic Resources Education Center 1900 Anacostia Dr. SE Washington, DC 20020 www.doee.dc.gov/arec

## Pre-K & Kindergarten

**River Life (1 hour)\*** – What animals visit the river throughout the day? Students will discover the diversity of life that lives in and around the Anacostia River.

**Nature Tales (1 hour)\*** – Students will explore the AREC on a guided tour and learn about the aquatic animals in the District of Columbia through a story, activity, and meet and greet of one of AREC's resident animals. Below is a list of the story time topics:

_	<b>Amphibians</b>	– Fishes	<ul><li>Invertebrates</li></ul>	– Reptiles
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### Lower Elementary School (1st - 2nd)

**River Life (1 hour)\*** – What animals visit the river throughout the day? Students will discover the diversity of life that lives in and around the Anacostia River.

**Sensational Skin (1.5 hours)\*\$@** – Amphibian skin holds a world of wonders, from anti-microbial properties to allowing some salamanders to live without lungs! Students will practice science inquiry through a series of simulations showing what makes amphibian skin so special.

**Nature Tales (1 hour)\*** – Students will explore the AREC on a guided tour and learn about the aquatic animals in the District of Columbia through a story, activity, and meet and greet of one of AREC's resident animals. See the list of topics under the Pre-K & Kindergarten section above.

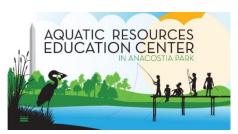
**When I Grow Up (1-1.5 hours)\*** – Fins for swimming and shells for safety – learn to recognize some of the District's aquatic animals and how they are born and grow. Students will investigate and compare life cycles using fish, frogs, and turtles as models.

## Upper Elementary School (3<sup>rd</sup> – 5<sup>th</sup>)

**Amazing Amphibian Adaptations (1.5 hours)\*** – From scaling walls with sticky toes or breathing without lungs to acting as a beacon for environmental health, the District's amphibians could be considered animal action heroes! Students will examine a variety of adaptations that make our local amphibians special and explore the important roles frogs and salamanders play in our environment.

**Curious Comparisons (1.5 hours)\*\$** – Ever wonder about the similarities between turtles and frogs? Or what makes a crayfish different from a sunfish? Students will dive into taxonomic classification by investigating the differences and similarities between vertebrate and invertebrate species, body forms, and functions.

**Fabulous Food Webs (1.5 hours)\*\$@**—It's a fish-eat-fish world, but who comes out on top? Students will explore the food webs and ecological relationships found in the Chesapeake Bay watershed.



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#### **Middle School**

**Bugs Don't Bug Me: Clues to Stream Health (1.5 hours)\*** – Did you know aquatic insects, worms, crustaceans, and mollusks can be used to assess water quality? Students will learn about these animal indicators and will calculate an index to determine stream health.

Conservation Concern: Save the Shad (1.5 hours)\* - Did you know the American Shad is the District of Columbia's state fish and that they leave the ocean to visit the District every spring to spawn? Students will learn about American Shad including their ecological role and how humans have influenced their populations.

**Fishable Waters (1.5 hours)\*** – Do you enjoy fishing? Are there any regulations on fishing in your area? Discover how the choices we make affect fish and their habitats.

**Wondrous Watersheds (1.5 hours)\*\$** – What's the big deal with watersheds? Why should we care about them? Students will investigate the Anacostia River watershed and learn about its importance in our environment and our role in its protection.

#### **High School**

**Alien Invaders (1.5 hours)\*** – Many science fiction stories feature otherworldly beings coming to Earth to harvest food, steal resources, exterminate life, and destroy the planet. But what happens when the horror is real and happening to native species right here in the waters of the District? Students will use simulations to gather data to evaluate the impacts of aquatic alien species and explore solutions for combating the invasion.

**Amphibian Advanced Inquiry (1.5 hours)\*** – Students are guided through a STEM-based investigation using local amphibian and wetland data in order to examine ecological impacts, mitigation, and conservation.

**CSI:** Anacostia River (1.5 hours)\* – Forget Las Vegas, Miami and New York, we have a mystery in our own backyard: Where have all the fish gone? Students will put their STEM skills to the test as they investigate the fishing regulations in DC.

**Working for Wildlife (1.5 hours)\*** – Are you interested in a career working with wildlife? Did you know that wildlife careers aren't just for scientists? They also include jobs like law enforcement officers and communication specialists. To find out more about these careers and to learn important job skills for any job, join us for our Working for Wildlife activity.